

What is claimed is:

1. A weapon system suitable for an underwater environment, said weapon system comprising:

a vehicle housing defined by a first portion and a second portion spaced apart from one another;

a gun system sealed within a waterproof housing, said gun system including a gun with a muzzle of said gun protruding from said waterproof housing, said gun system rotatably mounted to and between said first portion and said second portion at an axis of rotation; and

means for rotating said gun system to a position to fire said gun at a target.

2. The weapon system in accordance with claim 1 wherein said first and second portions are each configured to include a fixed wing and a plurality of movable control surfaces capable of maneuvering said weapon system.

3. The weapon system in accordance with claim 2 further comprising a swivelable tow coupling mounted to said vehicle housing wherein the swiveling action of said tow coupling stabilizes the position of said weapon system.
4. The weapon system in accordance with claim 3 further comprising means for searching for the target and controlling said gun system to fire at the target.
5. The weapon system in accordance with claim 2 further comprising means for propulsion.
6. The weapon system in accordance with claim 5 further comprising means for searching for the target and controlling said gun system to fire at the target.
7. A weapon system suitable for an underwater environment, said weapon system comprising:

a vehicle housing defined by first and second halves that are spaced apart from one another, said first and second halves balanced to each other as mirror images of one another with respect to an imaginary plane that

passes therebetween, wherein the balance of said first and second halves allows said vehicle housing to move through the water in a direction substantially aligned with the imaginary plane;

a gun system including a gun and ammunition sealed within a waterproof housing with a muzzle of said gun protruding from said waterproof housing, said gun system being rotatably mounted to and between said first and second halves of said vehicle housing at an axis of rotation, wherein said muzzle can discharge said ammunition therefrom into the water; and

means for rotating said gun system relative to said first and second halves of said vehicle housing to a position where said muzzle is positioned to fire said ammunition towards an underwater target.

8. The weapon system in accordance with claim 7 further comprising a swivellable tow couple mounted to said vehicle housing and centered on the imaginary plane wherein the swiveling action of said tow coupling stabilizes the position of said weapon system.

9. The weapon system in accordance with claim 8 wherein each said exterior of said first and second halves of said vehicle housing is configured to include:

a V-shaped fixed wing having a substantially forward-facing surface and a substantially aft-facing surface; and

a plurality of movable control surfaces capable of maneuvering said weapon system.

10. The weapon system in accordance with claim 9 wherein said means for rotating includes:

sonar arrays coupled to each of said substantially forward-facing surfaces and said substantially aft-facing surfaces; and

a means for processing outputs therefrom coupled to said sonar arrays such that said weapon system searches for the underwater target and determines the position for said gun system to fire at the underwater target.

11. The weapon system in accordance with claim 7 further comprising means for propulsion coupled to each of said first and second halves.

12. The weapon system in accordance with claim 11 wherein each said exterior of said first and second halves of said vehicle housing is configured to include:

a V-shaped fixed wing having a substantially forward-facing surface and a substantially aft-facing surface; and

a plurality of movable control surfaces capable of maneuvering said weapon system.

13. The weapon system in accordance with claim 12 wherein said means for rotating includes:

sonar arrays coupled to each of said substantially forward-facing surfaces and said substantially aft-facing surfaces; and

a means for processing outputs therefrom coupled to said sonar arrays such that said weapon system searches for the underwater target and determines the position for said gun system to fire at the underwater target.